

Claims

1. A system comprising:
  - a transmitter for transmitting at least one encoded wireless signal, the at least one encoded signal wireless signal having a predetermined range of transmission;
  - means, operatively coupled to the transmitter, for detecting the presence of at least one object in a position;
  - means, operatively coupled to the detecting means, for activating the transmitter to generate the at least one encoded wireless signal when the presence of the at least one object is detected;
  - a receiver, remotely located with respect to the transmitter, capable of sensing the at least one encoded wireless signal when the receiver is within the predetermined range of transmission; and
  - a receiver controller coupled to the receiver and having a timing function, the timing function timing to a time interval wherein, at the completion of each time interval, the receiver controller (i) repeats the timing function when the at least one encoded signal is sensed by the receiver or (ii) issues an alarm signal when the at least one encoded signal is not sensed by the receiver.
2. A system as in claim 1 wherein the at least one encoded wireless signal is an RF signal.
3. A system as in claim 1 wherein the detecting means comprises at least one switch that is an open switch whenever the at least one object is not in the position.
4. A system as in claim 3 wherein said at least one switch comprises at least one pressure switch.
5. A system as in claim 1 further comprising means, operatively coupled to the receiver controller, for communicating an alarm when the receiver controller issues an alarm signal.

6. A system as in claim 5 wherein the communicating means comprises audio means for generating at least one audio output in response to the alarm signal.

7. A system as in claim 6 wherein the communicating means further comprises a second means, operatively coupled to the activating means, for generating an audio output when the detecting means senses that the at least one object is in the position.

8. A system as in claim 6 wherein the receiver controller further comprises a replaceable source for supplying power to the receiver, the receiver controller, and the communicating means.

9. A system as in claim 7 wherein said activating means further comprises a replaceable source for supplying power to the transmitter, the detecting means, and the activating means.

10. A system as in claim 1 wherein the at least one object is a child.

11. A safety apparatus comprising:

a child safety seat;

a transmitter, operatively connected to the child safety seat, for transmitting at least one encoded wireless signal, the signal having a predetermined range of transmission;

means, operatively coupled to the transmitter, for monitoring the presence of a child in the safety seat;

means, operatively coupled to the monitoring means, for activating the transmitter to generate the at least one encoded wireless signal when the presence of the child in the child safety seat is detected;

a receiver, configured to be in the possession of a caregiver to the child, capable of sensing the at least one encoded wireless signal when the receiver is within the predetermined range of transmission;

{00014124:1 }

a receiver controller coupled to the receiver and having a timing function, the timing function timing to a time interval wherein, at the completion of each time interval, the receiver controller (i) repeats the timing function when the at least one encoded signal is sensed by the receiver or (ii) issues an alarm signal when the at least one encoded signal is not sensed by the receiver; and

means, operatively coupled to the receiver controller, for communicating an alarm to the caregiver when the receiver controller issues an alarm signal.

12. An apparatus as in claim 11 wherein the at least one encoded wireless signal is an RF signal.

13. An apparatus as in claim 11 wherein the monitoring means comprises at least one switch that is an open switch whenever the child is not in the child safety seat.

14. An apparatus as in claim 13 wherein said at least one switch comprises at least one pressure switch.

15. An apparatus as in claim 11 wherein the communicating means further comprises audio means for generating at least one audio output in response to the alarm signal.

16. An apparatus as in claim 15 wherein the communicating means further comprises a second means, operatively coupled to the activating means, for generating an audio output when the monitoring means detects that the child is placed in the safety seat.

17. An apparatus as in claim 15 wherein the receiver controller further comprises a source for supplying power to the receiver, the receiver controller, and the communicating means.

18. An apparatus as in claim 17 wherein the source is replaceable.

19. An apparatus as in claim 17 wherein said activating means further comprises a source for supplying power to the transmitter, the monitoring means, and the activating means.

20. An apparatus as in claim 19 wherein the source is replaceable.

21. A system for alerting a caregiver that a child has been left unattended in a safety seat, comprising:

a transmitter for transmitting at least one encoded wireless signal, the transmitter having a predetermined range of transmission;

means, operatively coupled to the transmitter, for detecting the presence of the child in the safety seat;

means, operatively coupled to the detecting means, for activating the transmitter to generate the at least one encoded wireless signal when the presence of the child is detected;

a receiver, configured to be in the possession of the caregiver, capable of sensing the at least one encoded wireless signal when the receiver is within the predetermined range of transmission;

a receiver controller coupled to the receiver and having a timing function, the timing function timing to a time interval wherein, at the completion of each time interval, the receiver controller (i) repeats the timing function when the at least one encoded signal is sensed by the receiver or (ii) issues an alarm signal when the at least one encoded signal is not sensed by the receiver; and

means, operatively coupled to the receiver controller, for communicating an alarm to the caregiver when the receiver controller issues an alarm signal.

22. A system as in claim 21 wherein the at least one encoded wireless signal is an RF signal.

23. A system as in claim 21 wherein the detecting means comprises at least one switch that is an open switch whenever the child is not in the safety seat.

{00014124:1 }

24. A system as in claim 23 wherein said at least one switch comprises at least one pressure switch.
25. A system as in claim 21 wherein the communicating means further comprises audio means for generating at least one audio output in response to the alarm signal.
26. A system as in claim 25 wherein the communicating means further comprises a second means, operatively coupled to the activating means, for generating an audio output when the detecting means senses that the child is placed in the safety seat.
27. A system as in claim 25 wherein the receiver controller further comprises a source for supplying power to the receiver, the receiver controller, and the communicating means.
28. A system as in claim 27 wherein the source is replaceable.
29. A system as in claim 27 wherein said activating means further comprises a source for supplying power to the transmitter, the detecting means, and the activating means.
30. A system as in claim 29 wherein the source is replaceable.
31. A safety apparatus comprising:  
means for monitoring the presence of a child in a child seat; and  
means, operatively connected to the monitoring means and configured to have a first portion affixed to the child seat and a second portion configured to be maintained in the possession of a caregiver to the child, for wirelessly tethering a caregiver of the child to the child seat, wherein the wireless tethering means is self-activated when the monitoring means first senses the presence of the child in the child seat and wherein the wireless tethering

means communicates an alarm to the caregiver when the caregiver ventures beyond a predetermined distance from the child seat without having removed the child from the child seat.

32. A safety apparatus as in claim 31 wherein the wireless tethering means is deactivated when the child is removed from the child seat.

33. A safety apparatus as in claim 31 wherein the alarm communicated to the caregiver is deactivated when the child is removed from the child seat.

34. A safety apparatus as in claim 31 wherein the alarm communicated to the caregiver is deactivated when the caregiver returns to a position within the predetermined distance to the child seat.

35. A safety apparatus as in claim 31 wherein the alarm communicated to the caregiver and the wireless tethering system are deactivated when the child is removed from the child seat.

36. A safety apparatus as in claim 35 wherein the alarm communicated to the caregiver is deactivated when the caregiver returns to a position within the predetermined distance to the child seat.

37. A safety apparatus as in claim 31 wherein the first portion of the wireless tethering means comprises a transmitter and the second portion of the wireless tethering means comprises a receiver that are operatively coupled to one another.

38. A method for alerting a caregiver of a child, comprising steps for:  
automatically activating an alert system comprising a transmitter by placing the child in a pressure sensitive position;

{00014124:1 }

transmitting a wireless signal from the vicinity of the child, the signal having a predetermined range;

maintaining in the possession of the caregiver a receiver for the wireless signal; and communicating an alarm to the caregiver when the receiver is beyond the predetermined range of the signal for longer than a predetermined time interval.

39. A method as in claim 38 further comprising a step for deactivating the alert system when the child is removed from the pressure sensitive position.

40. A method as in claim 38 further comprising monitoring the pressure sensitive position to detect the presence or absence of the child once the alert system is activated.

41. A method as in claim 40 wherein the step for monitoring the pressure sensitive position comprises the act of sensing the weight present in the position.

42. A method as in claim 38 wherein the step for communicating an alarm comprises the act of sending an audible sound to the caregiver.

43. A method as in claim 38 wherein the step for communicating an alarm comprises the act of sending a tactile vibration to the caregiver.

44. A method as in claim 38 further comprising inactivating the alarm to the caregiver when the child is removed from the pressure sensitive position.

45. A method as in claim 38 further comprising inactivating the alarm to the caregiver when the caregiver returns within the predetermined range of the signal.

46. A method for alerting a caregiver that a child has been left unattended in a child safety seat, comprising the acts of:

sensing the weight present in the child safety seat;

sending an activating signal, once the presence of the child in the child safety seat has been sensed, to a transmitter that is operatively connected to the child safety seat, the transmitter having a predetermined range of transmission for a wireless signal;

transmitting an encoded wireless signal capable of being sensed by a receiver that is operatively coupled to the transmitter; and

wirelessly tethering the caregiver by maintaining the receiver in the vicinity of the caregiver and by issuing an alarm to the caregiver in the circumstance wherein the receiver is outside the predetermined range of transmission but the child is still positioned in the safety seat.